PCW 09 22 Coordinate transformations v3

Question 1

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = 2 \cdot f\left[\frac{x+8}{6}\right] - 3$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 2

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = 2 \cdot f[9x+5] + 7$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 3

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = \frac{f[4x-3]+9}{7}$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

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Question 4

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = \frac{f\left[\frac{x}{6} + 4\right] - 9}{8}$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 5

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = 7 \cdot \left(f\left[\frac{x-3}{8}\right] + 5 \right)$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.

Question 6

Consider the two functions f and g, where g is defined as a transformation of f:

$$g[x] = \frac{f[2(x-7)]}{4} - 5$$

For point (a, b) on curve f there is a corresponding point on the curve g. Write the coordinate transformation.